

- [19] State Intellectual Property Office of the People's Republic of China
- [51] Int. Cl<sup>7</sup>
  G06F 17/00
- [12] Specification of Invention Patent Application
- [21] Application Number: 00116355.8
- [43] Publication Date: 2000, 11, 08
- [11] Publication Number: CN1272654A
- [22] Application Date: 2000, 06, 04
- [21] Application Number: 00116355.8
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Claims: 1 Page; Specification: 2 Pages; Drawings: 1 Page

- [54] Title: Anti-Fake Method for Merchandise by Using Digital Information Identification
- [57] Abstract

The present invention relates to an anti-fake method for merchandise by using the digital information

identification. In the method, the additional anti-fake information defined by manufacturers is also printed on the identification article of merchandise other than the unique anti-fake digital code. When a consumer makes an inquiry through communication means to the anti-fake center after buying a merchandise, the anti-fake center not only checks the anti-fake digital code, but also tells the consumer about anti-fake information corresponding to the inquired digital code. The anti-fake information can be anti-fake patterns and their combination additionally printed on the identification article, or can be said anti-fake digital code itself. The present invention can greatly raise antifake property through the double checking process, and the anti-fake information on the identification article can be randomly defined by manufacturers so as to implement initiative monitoring and control to the anti-fake identification.

#### Claims

- 1. An anti-fake method for merchandise by using digital information identification, a unique anti-fake digital code being printed on the identification article of merchandise, wherein:
- a. additional anti-fake information defined by manufacturers is also printed on the identification article of merchandise;
- b. all the anti-fake digital codes and their corresponding anti-fake information are in advance stored in a database of the anti-fake center;
- c. a consumer who has been bought the merchandise makes an inquiry through communication means to the antifake center, the anti-fake center checks validity of the anti-fake digital code, and the information about fake products will be fed back if the anti-fake digital code is not valid, the information will be fed back to tell the consumer the anti-fake information corresponding to the inquired digital code and a sign will be made in the database so as to show that the digital code has been inquired at the same time if the anti-fake digital code is valid, then the consumer can determine whether the bought merchandise is a certified product by checking the anti-fake information:

- d. when the same digital code is inquired again, the anti-fake center will feed back information about the digital code having been inquired.
- 2. An anti-fake method for merchandise by using digital information identification as claimed in claim 1, wherein said anti-fake information is at least one anti-fake pattern additionally printed on the identification article.
- 3. An anti-fake method for merchandise by using digital information identification as claimed in claim 2, wherein said anti-fake pattern is English letters or specified Chinese characters or animal patterns or plan patterns or fruit patterns, or their random combination.
- 4. An anti-fake method for merchandise by using digital information identification as claimed in claim 1, wherein said anti-fake information is the information of the anti-fake digital code itself.
- 5. An anti-fake method for merchandise by using digital information identification as claimed in claim 4, wherein said information of the anti-fake digital code itself is the print color or font or arrange manner of the anti-fake digital code.

### Description

# Anti-Fake Method for Merchandise by Using Digital Information Identification

The present invention relates to an anti-fake method for merchandise by using digital information identification.

At present, printing additional digital information on the merchandise or the identification article of merchandise has become a very useful anti-fake way for merchandise. method is: anti-fake digital code is printed on the merchandise or its identification article, the digital code is generated randomly or by encrypting; a piece of merchandise is corresponded to only one digital code, all the anti-fake digital codes are stored in a computer of the anti-fake center; when a consumer who has been bought the merchandise makes an inquiry with telephone or online computer to the anti-fake center, the anti-fake center checks the merchandise corresponding to the digital code manually or by computer and feeds back the information about whether it is a genuine merchandise to the consumer through telephone speech, or feeds back the information about whether it is a genuine merchandise to the computer used by the consumer. This method has a strong anti-fake ability because fakers can not guess or contra-reason how the antifake digital code is generated. However, not all the manufacturers have the generation technology of the antifake digital code and are capable of setting up an anti-fake center, so that organizations specializing in providing anti-fake digital code for the manufactures, and anti-fake centers providing services replacing appear. But this must result in another problem that even the anti-fake digital code using encrypted algorithm could not be deciphered, but if the internal workers of those organizations divulge the secret about the anti-fake digital code, new fake action will be resulted in.

An object of the present invention is to provide a merchandise anti-fake method by using digital information referring to above mentioned prior art, the anti-fake method can be initiatively monitored by manufacturer.

The method of the present invention is an additional anti-fake information defined by manufacturers is printed on the identification article of merchandise other than the unique anti-fake digital code, and all the anti-fake digital code and their corresponding anti-fake information are in advance stored in a database of the anti-fake center, the consumer who has been bought the merchandise makes an inquiry through communication means to the anti-fake center, the anti-fake center checks validity of the anti-fake digital code, and the information about fake products will

be fed back if the anti-fake digital code is not valid, the information will be fed back to tell the consumer the anti-fake information corresponding to the inquired digital code and a sign will be made in the database so as to show that the digital code has been inquired at the same time if the anti-fake digital code is valid, then the consumer can determine whether the bought merchandise is a certified product by checking the anti-fake information, when the same digital code is inquired again, the anti-fake center will feed back information about the digital code having been inquired.

Said anti-fake information can be anti-fake patterns and their combination additionally printed on the identification article, such as English letters, specified Chinese characters, animal patterns, plan patterns, and fruit patterns etc., also can be the information of said anti-fake digital code itself, such as the print color, font and arrange manner etc. of the anti-fake digital code.

Comparison to the prior art, the method of the present invention provides double checking processes: the anti-fake center checks the anti-fake digital code printed on the identification article of merchandise, and consumers check the merchandise by using the fed back additional information printed on the identification article, so that the double checking process of the invented method greatly raises its

anti-fake property, and said anti-fake information on the identification article can be randomly defined by manufacturers so as to realize initiative monitoring and control to the anti-fake identification, and efficiently prevent counterfeit action arose from divulging a secret the anti-fake digital code by organization providing the anti-fake digital code.

Brief Description of The Drawings

Fig. 1 is a schematic flowchart of an embodiment of the present invention.

The present invention is described in further detail referring to the drawings of the preferred embodiment.

As shown in Fig. 1, it is an embodiment of the present invention applied in an automatic speech telephone anti-fake system. The system includes an anti-fake identification card 1 packed with the merchandise, a realtime inquiring computer 2 of the anti-fake center, and a common telephone 3.

In the embodiment, a unique encrypted anti-fake digital code "0759051209891733076602" corresponding to the merchandise is printed on the anti-fake identification card 1 of the merchandise, and letter "B and an anti-fake "chicken" pattern formed by anti-fake pattern are also printed on the identification card 1. The anti-fake identification card 1 can be manufactured by an organization being capable of printing anti-fake pattern, wherein the

anti-fake digital code can be given by the organization specializing in providing anti-fake digital code through computer calculation, while letter "B" and "chicken" pattern as additional anti-fake information is defined by the manufacturer producing the merchandise. A group of merchandise can be designated same anti-fake information, or each merchandise can be designated by random designation.

All the anti-fake digital codes and their corresponding anti-fake information are in database form stored in the realtime inquiring computer 2 of the anti-fake center. The anti-fake center can be set up by manufacturer itself, or can be consigned to an organization specializing in verification of merchandise anti-fake digital code.

The consumers who have been bought the merchandise dial the inquiring hotline of the anti-fake center by using common telephone 3 (fixed telephone or mobile telephone), and then input the anti-fake digital code printed on the merchandise anti-fake identification card 1 by using the pushbutton of the telephone according to the voice prompt given by the realtime inquiring computer 2 of the anti-fake center. The computer verifies the anti-fake digital code by inquiring the database of the anti-fake of the anti-fake digital code, and will tell the consumers that the merchandise is not a certified merchandise by speech if the anti-fake digital code is invalid; and will tell the

consumers the anti-fake digital code is valid, and the manufacturer information corresponding to the anti-fake digital code and the merchandise if the anti-fake digital code is valid. And at the same time the consumers are told that the anti-fake identification card of the merchandise should have letter "B" and anti-fake "chicken" pattern formed by the anti-fake pattern so that the consumers themselves can verify the bought merchandise again. At last, the computer makes a mark showing the anti-fake digital code has been inquired in the database. When the same digital code is inquired again, the anti-fake center then feed back information about the digital code having been inquired.

Said anti-fake pattern also can be the specified Chinese characters, the patterns of all kinds of animals, plans, fruits, or their random combination. If it is hard to print the anti-fake pattern, a simple method can be adopted, that is, the manufacturer can designate the anti-fake digital code itself as additional anti-fake information, for example, the print color, font, and arrange manner etc. of the anti-fake digital code.

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[51] Int. Cl7

G06F 17/00

### [12] 发明专利申请公开说明书

[21] 申请号 00116355.8

[43]公开日 2000年11月8日

『11]公开号 CN 1272654A

[22]申請日 2000.6.4 [21]申請号 00116355.8 [71]申請人 宁波开发区亚太传播实业有限公司 地址 315010 浙江省宁波市解放南路 145 号 [72]隶明人 马 良 [74]专利代理机构 宁波市专利事务所 代理人 徐雪波

权利要求书1页 说明书2页 附图页数1页

## [54] **发明名** 中 一 种 利用 <u>教 码</u> 信息 标识 的 商品 防 伤 方 法 [57] <del>美</del> 墓

一种利用数码信息标识的商品的伪方法,在商品的标识物上除了印有唯一的的 伪数码外还有生产厂家指定的额外的伪信息,消费者在购买商品后通过通讯手 段向防伤中心查询时,防伤中心除了核对防伤数码的正确性外还告知消费者所 查询数码应该对应的防伤信息,所述的防伤信息可以是在标识物上另外印刷的 防伤图案及其组合,也可以是所述防伤数码本身的信息。本发明方法通过两道 双向核对过程大大增强了防伤性能,而且所述标识物上的防伤信息可以由生产厂家随机指定,从而实现了对防伤标识的主动监控。

